

Appl. No. 10/688,096
Response Dated June 22, 2006
Reply to Office Action of March 23, 2006

• • R E M A R K S / A R G U M E N T S • •

The Official Action of March 23, 2006 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, independent claim 1 has been changed to recite that the transversely inner edge of the first elastic segment has a shape that curves transversely outward from a longitudinal central portion to longitudinal opposite ends of the first elastic segment.

Support for this limitation can be readily found in the drawings.

Entry of the changes to claim 1 is respectfully requested.

Claims 1-10 are pending in the application.

Claims 1-3 and 5-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,447,508 to Numano et al. in view of U.S. Patent No. 6,482,195 to Kumasaka.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Numano et al. in view of Kumasaka and further in view of European Patent Application No. EP 1 243 237 A2 to Mishima et al.

For the reasons set forth below, it is submitted that all of the pending claims are allowable over the prior art of record and therefore, each of the outstanding rejections of the claims should properly be withdrawn.

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Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Numano et al. as describing:

...a disposable pants-type wearing articles comprising an elastically stretchable chassis (col. 3, lines 11-12), front and rear waist regions, a liquid absorbent panel attached to an inner surface of the outer sheet (Figure 1 and col. 4, lines 20-54). The article comprises a first elastic segment extending in the leg holes 11A-11C, 12A-12C, and a second elastic segment extending in the crotch region (Figure 1).

The Examiner concedes that

Numano does not disclose the stretch of the elastics and the relationship between the leg-circumferential stretch stress and transverse stretch stress.

Accordingly, the Examiner has relied upon Kumasaka as teaching:

...compression marks might be left on the front thighs if the stretch stress is uniform in all the elastic members and the stretch stress is relatively high. Kumasaka further teaches it is possible to alleviate the problem of compression marks by varying the stretch stress of elastic members in the leg and crotch regions from the elastic placed toward the front and rear panels. Kumasaka teaches varying the stretch stress in the elastic members helps to alleviate the possibility of compression marks and simultaneously provides a fit around the wearer's thighs (col. 1, line 51 through col. 2, line 2, col. 7, line 25 through col. 8, line 9).

In combining the teachings of Numano et al. and Kumasaka the Examiner takes the position that:

One having ordinary skill in the art would have been motivated, based upon the teachings of Kumasaka to vary the stretch stress in the waist region's upper margin to be higher or lower than the leg-circumferential stretch stress to reduce compression marks and discomfort to the wearer.

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It is respectfully submitted that the teachings of the prior art does not result in applicants' claimed invention and otherwise does not suggest or render obvious applicants' claimed invention.

Numano et al. is directed at improving a diaper (shown in Fig. 2) that has elastic members 51 that extend along the leg-opening cut-outs. Numano et al.'s improvement involves providing elastic members 11 and 12 that are configured and aligned to cross one another on longitudinal center areas of the front and rear bodies 5 and 6 as shown in Fig. 1. The prior art Numano et al. improves upon is shown in Fig. 2 and includes elastic members 51 that curve transversely outward at opposite longitudinal ends thereof as shown.

Numano et al.'s invention/improvement over the prior art involves providing elastic members that have central portions that extend parallel to one another along the crotch zone 7 and ends portions that "extend into the front and rear bodies 5, 6 and terminate at right sides 17, 18 of these bodies" as shown.

Numano et al. also teach that the liquid-absorbent core 4 is relatively rigid.

Accordingly, it can be appreciated that:

1) In order to provide the necessary seal along the legs at the crotch regions, Numano et al. requires the elastic members to extend parallel to one another and parallel and transversely outward from the edges of the liquid-absorbent core in the crotch zone; and

2) Numano et al. requires that the end portions of the elastic members to extend transversely inwardly and across the "front and rear bodies 5, 6" rather than have the curved shape depicted in prior art Fig. 2.

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It is this submitted that Numano et al. completely fails to teach, and actually teaches away from, elastic members having a curved shape in the crotch zone.

Accordingly, Numano et al. flails to teach applicants' claim limitation that a transversely inner edge of the first elastic segment has a shape that curves transversely outward from a longitudinal central portion to longitudinal opposite ends of the first elastic segment.

Kumasaka is directed to the use of overlapping elastic members that extend along the leg-opening cut-outs, but which have different stretch stress properties.

Kumasaka is limited to improvements to "leg-holes elastic members" and therefore lacks any consideration relevant to the manner in Numano et al. extends the ends of the elastic members to cross the front and rear bodies 5, 6.

Whereas the Examiner has taken the position that:

One having ordinary skill in the art would have been motivated, based upon the teachings of Kumasaka to vary the stretch stress in the waist region's upper margin to be higher or lower than the leg-circumferential stretch stress to reduce compression marks and discomfort to the wearer,

It is submitted that Kumasaka is limited to varying the stretch stress in the "leg-holes elastic members" and therefore fails to teach anything about varying the stretch stress "in the waist region's upper margin" as the Examiner states.

Applicants' independent claim requires a chassis that is composed of a first elastic segment and a second elastic segment.

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The first elastic segment extends substantially along peripheral portions forming leg-holes from a transversely middle zone of the crotch region to lateral portions of the front and rear waist regions so that a transversely inner edge of the first elastic segment has a shape that curves transversely outward from a longitudinal central portion to longitudinal opposite ends of the first elastic segment.

The second elastic segment defined by a remaining portion of the chassis except for the first elastic segment.

The first elastic segment has a stretch stress higher than that of the second elastic segment.

It is submitted that the teachings of Kumasaka are not applicable to Numano et al. inasmuch as the shape of the "leg-holes elastic members" of Kumasaka are similar to the prior art shown in Numano et al.'s Fig. 2 which Numano et al. teaches but does not use.

Moreover, it is submitted that even if the teachings of Kumasaka were applied to Numano et al. the result would fail to result in a diaper having a chassis that is composed of a first elastic segment and a second elastic segment, wherein the first elastic segment has a stretch stress higher than that of the second elastic segment with the first elastic segment extending substantially along peripheral portions forming leg-holes from a transversely middle zone of the crotch region to lateral portions of the front and rear waist regions and the second elastic segment defined by a remaining portion of the chassis except for the first elastic segment.

That is, the resulting combination of Numano et al. and Kumasaka would at best (if properly combinable) result in discrete portions of the peripheral edge of the leg-holes having different stretch

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stresses, without any first elastic segment extending substantially along peripheral portions forming leg-holes from a transversely middle zone of the crotch region to lateral portions of the front and rear waist regions as required by applicants' claimed invention, simply because the first elastic members 51 of Kumasaka only extend in a limited central portion of the crotch region and do not extend "to lateral portions of the front and rear waist regions."

Thus, it is submitted that whereas Kumasaka teach varying the stretch stress along the leg-holes of a diaper, Kumasaka do not teach varying the stretch stress of regions of a diaper as recited in applicants' pending claims.

The Examiner has relied upon Mishima et al. as teaching a protrusion in an absorbent article. This reliance upon Mishima does not address or overcome the Examiner's reliance upon Numano et al. and Kumasaka discussed above.

Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding rejection of the claims should hence be withdrawn.

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Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remains outstanding issues in the present application that could be resolved, the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,


Michael S. Gzybowski
Reg. No. 32,816

BUTZEL LONG
350 South Main Street
Suite 300
Ann Arbor, Michigan 48104
(734) 995-3110

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